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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

JOHNSON, VICKY A

ART UNIT PAPER NUMBER

3682

DATE MAILED: 04/16/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/692,083

Applicant(s)

MOMBRINIE, BRUNO

Examiner

Vicky A. Johnson

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 55-61 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 61 is/are allowed.
- 6) ☒ Claim(s) 55-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 October 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 and 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of the invention of Group I and the species of Figure 2 in Paper No. 9, filed February 20<sup>th</sup> 2002 is acknowledged. For the reasons set forth below the restriction requirement and the election requirement are hereby withdrawn.

A preliminary amendment was filed on November 1, 2001. The preliminary amendment indicates that claims 1-54 are to be canceled and that new claims 55-62 are substituted therefore. However, the amendment filed November 1<sup>st</sup> 2001 was filed with claims numbered as 55-58 and 60-62. accordingly, claims 60-62 are being renumbered in accordance with 37 CFR 1.126 as claims 59-61, respectively. As such, there is no method from which claims 60 and 61 (now renumbered as 59 and 60) depend and therefore, the restriction and election of species is improper and have been withdrawn

### ***Priority***

2. Applicant's claim for domestic priority under 35 U.S.C. 120 is acknowledged.

### ***Drawings***

3. The drawings are objected to because in Figure 6 the lead line for "130" should be pointing to the inside diameter, there is a lead line at the top of the Figure with no reference character and in Figure 20 "206" should be "202". A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid

abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

4. Claims 57-60 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claim 57 recites the limitation "the tapered crank arm" in line 1. There is insufficient antecedent basis for this limitation in the claim.
6. Claims 59 and 60 are confusing because they refer to a method which was not previously set forth and because they depend from themselves.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osborne in view of Smith et al.

Osborne discloses crank set comprising: a first member (I) a second member (H) a spider (K) connected to the second member (see Fig 1), a coupling securing the first and second members (I', H'), each of the members include a crank arm (I,H) and a portion of a crank axle (I',H') with the crank arm (see Fig 1) and the portion of the crank axle being a continuous, monolithic thin wall tubular structure (see Fig 1).

Osburne does not disclose the first and second members being tubular.

discloses a tubular crank arm (see Fig 1A).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the crank arms of Osburne to be tubular as taught by Smith et al in order to improve reliability and strength (col. 2 lines 63-65).

Re claim 56, Osburne shows the portion of the crank axle is one half axle length of the crank set (see Fig 1).

Re claim 57, Smith et al shows a tapered crank arm having an elliptical cross section (see Figs 2B, 3B, 3C).

***Claim Rejections - 35 USC § 103***

9. Claim 58 is rejected under 35 U.S.C. 103(a) as being unpatentable over Osburne in view of Smith et al as applied to claims 55-57 above, and further in view of Philpot et al.

Osburne discloses a crank set as described above, but does not disclose the tubular members made of an aramid fiber composite material.

Philpot et al disclose a method of making tubular members for bicycles (col. 1 lines 11-19) using an aramid fiber composite material (col. 4 lines 12-19).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the crank set of Osburne to be made using aramid fibers as taught by Philpot et al in order to increase the strength to weight ratio (col. 2 lines 54-64).

***Allowabl Subj ct Matt r***

10. Claim 61 is allowed.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

951,137 Lowrance (coupling)

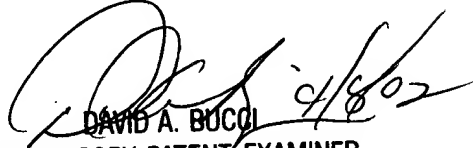
6,022,054 Hemphill et al (coupling)

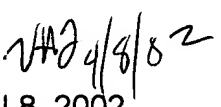
5,263,351 Berg III (coupling)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vicky A. Johnson whose telephone number is (703) 305-3013. The examiner can normally be reached on Monday-Thursday (7:00a-5:00p).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Bucci can be reached on (703) 308-3668. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7687 for regular communications and (703) 305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

  
DAVID A. BUCCI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600

vaj   
April 8, 2002